

~~TKESHELASHVILI~~
KOMETIANI, P. A., TKESHELASHVILI, L. K., and OVSYANKO, T. A.

"Applications of Phosphorous Esters of Choline, Ethanolamine and Serine to
Phospholipides Synthesis in Brain,"

paper to be presented at 2nd UN Intl.' Conf. on the peaceful uses of Atomic
Energy, Geneva, 1 - 13 Sept 58.

TKESHELASHVILI, L. M., Cand Med Sci -- (diss) ■ "Treatment of diaphysial fractures of both bones of the forearm by intra-osseous fixation."

Tbilisi, 1958. 25 pp (Tbilisi [†]State Med Inst), 200 copies (KL, 15-58,

ii 119)

-86-

21(1); 17(0)

KOMETIANI, P.A.; TKESHELASHVILI, L.K.

Conversions of phosphoric esters of choline, ethanolamine, and
serine in the brain. Ukr.biokhim.zhur. 31 no.6:913-936 '59.

(CHOLINE)

(ETHANOL)

(SERINE)

(MIRA 13:5)

TKESHELASHVILI, L.K. (Tbilisi)

Changes in the mucous membrane of the pharynx during the menstrual cycle. Zhur. ush., nos. i gorl. bol. 23 no.4: 63-65 J1-Ag'63. (MIRA 16:10)

1. Iz kliniki bolezney ukha, gorla i nosa (zav. - prof. S.N. Khechinashvili) Tbilisskogo instituta usovershenstvovaniya vrachey i iz Nauchno-issledovatel'skogo instituta fiziologii i patologii zhenshchiny (zav. - prof. I.F.Zhordania [deceased]) Ministerstva zdravookhraneniya Gruzinskoy SSR.
(MENSTRUATION) (PHARYNX)

KIPSHIDZE, N. N.; CHUMBURIDZE, T. I.; TKESHELASHVILI, L.K.; TVIDDIANI, D.D.;
TORDIYA, M. V.; DUMBADZE, Z. G.; SALUKVADZE, N. S.; DIDERASHVILI, A. A.;
GAVAKHISHVILI, N. N.

Studies on Cardiovascular System, some Biochemical, Hematologic and
Haemostatic Blood Indications in Old Age. Clinical Cardiology

Gerontology, 6th International Congress, Copenhagen, Denmark
11-16 August 1963

TKESHELASHVILI, L.K.; KOMETIANI, P.A.

Studying biochemical transformations of phosphoryl serine in the
brain. Trudy Inst. fiziol. AN Gruz. SSR 12:163-173 '61.
(MIRA 15:2)

(BRAIN) (SERINE)

TKESHELASHVILI, L.M.; SIMONISHVILI, A.Sh.

Internal fixation ~~in fractures~~ during childhood. Soob. AN
Gruz. SSR 25 no. 3:357-362 S '60. (MIRA 14:1)

1. Tbilisskiy gosudarstvennyy institut usovershenstvovaniya
vrachey. Predstavleno akademikom K.D. Eristavi.
(INTERNAL FIXATION IN FRACTURES)

TKESHELASHVILI, L.M.

Intraosseous fixation in tubular bone fractures with a pin
made from a cow's horn. Trudy Tbil. GIDUV 6:397-405 '62.
(MIRA 16:2)

(INTERNAL FIXATION IN FRACTURES)

TKESHELASHVILI, N.K., kand.tekhn.nauk; ASHCHEIAN, O.A., kand.tekhn.nauk;
OSTASHVILI, T.I.

Mechanical injuries to tea leaves and investigating their
effect on the quality of production for the purpose of im-
proving designs of plucking machinery. Trudy VNIICHP no.1:71-82
'58. (MIRA 12:5)

(Tea machinery)

NOGAYDELI, A.I.; TRESHELASHVILI, R.Sh.; NAKAIDZE, L.I.

Reaction of dimethyldichlorosilane with 1,4-dihydro-1,
4-dilithium- β -methylnaphthalene. Soob. AN Gruz. SSR
38 no. 3:559-566 Je '65. (MIRA 18:12)

1. Tbilisskiy gosudarstvennyy universitet. Submitted Jan. 30,
1965.

L 1128-66 EWT(m)/EPF(c)/ENP(j) RPL WW/RM

ACCESSION NR: AP5022931

UR/0062/65/000/008/1396/1402
546.287

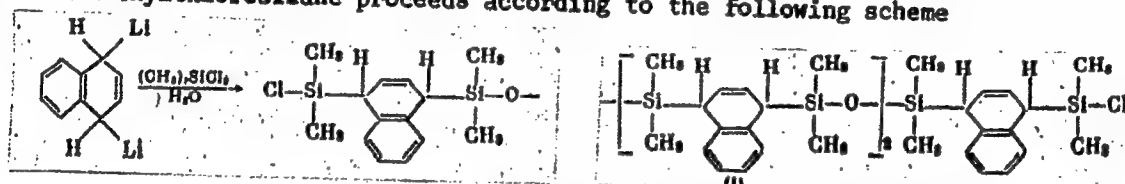
AUTHOR: Tkeshelashvili, R. Sh.; Andrianov, K. A.; Nogaydeli, A. I.

TITLE: Reaction of dimethyl- and phenylmethyldichlorosilanes with 1,4-dilithium-1,4-dihydronaphthalene

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 8, 1965, 1396-1402

TOPIC TAGS: dimethyldichlorosilane, condensation reaction

ABSTRACT: The reaction of dimethyl- and phenylmethyldichlorosilanes with dilithium derivatives of naphthane was studied to determine its usefulness in the synthesis of oligomers. The condensation reaction of 1,4-dilithium-1,4-dihydronaphthalene with dimethylchlorosilane proceeds according to the following scheme

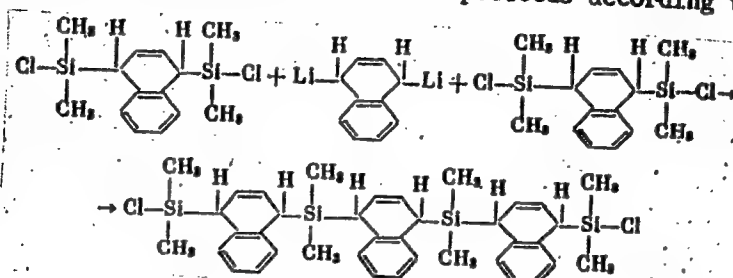


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ACCESSION NR: AP5022931

The reaction product is a tetramer with a boiling temperature of 218-220°C (at 1 mm Hg). In the absence of moisture this reaction proceeds according to



This scheme was followed also in the case of condensation with phenylmethyldichlorosilane. In this case the products were: a dimer boiling at 200-205°C (1 mm Hg) and a tetramer boiling at 245-250°C (1 mm Hg). Boiling temperatures at reduced pressure, refractive indices, and molecular weights (elemental analysis) were determined for all reaction products. In order to confirm the structure, the reaction products were hydrolyzed to the corresponding dihydroxy-derivatives with various degrees of

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ACCESSION NR: AP5022931

polymerization and transformed into other derivatives. Orig. art. has: 2 tables. ³

ASSOCIATION: Institut elementoorganicheskikh sovedineniy Akademii nauk SSSR
(Institute of Elemental Organic Compounds, Academy of Sciences, SSSR) ^{44, 55}

SUBMITTED: 09Jul64

ENCL: 00

SUB CODE: GC, OC

NO REF SOV: 001

OTHER: 000

Card 3/3 (11)

NOGAIDELI, A.I.; TKESHELASHVILI, R.Sh.

Condensation of acetylene with acetone in the vapor phase in the presence
of caustic soda deposited on activated gumbrin. Zhur. prikl. khim. 38
no.7:1639-1640 J1 '65.
(MIRA 18:7)

1. Tbilisskiy gosudarstvennyy universitet.

TKESHELASHVILI, T.V.

Hematological modifications following a major resection of the small intestine. Seeb.AN Gruz.SSR 17 no.4:343-350 '56. (MIRA 9:9)

1.Akademiya nauk Gruzinskey SSR, Institut eksperimental'noy i klinicheskey khirurgii i gematologii, Tbilisi. Predstavlene akademikom K.D.Eristavi.
(INTESTINES--SURGERY) (BLOOD--ANALYSIS AND CHEMISTRY)

~~TKESHELASHVILI, T.V.~~

TKESHELASHVILI, T.V.

Functional associations between segments of the small intestine.
Soob. AN Gruz. SSR 16 no. 4: 325-330 '55. (MIRA 8:12)

1. Akademiya nauk Gruzinskoy SSR, Institut eksperimental'noy i
klinicheskoy khirurgii i gematologiiim Tbilisi. Predstavleno dey-
stvitel'nyy chlenom Akademii K.D. Eristavi.
(Intestines)

TKESHELASHVILI, T.V.

Nerve regulation of the motor function of the small intestine.
Soob.AN Gruz.SSR 17 no.2:163-168 '56.

(MLRA 9:8)

1. Akademiya nauk Gruzinskoy SSR, Institut eksperimental'noy i
klinicheskoy khirurgii i gematologii, Tbilisi. Predstavleno
deystvitel'nym chlenom Akademii K.D. Eristaii.
(INTESTINES)

TKESHELASHVILI, T.V.

USSR/Human and Animal Morphology - Blood. General Problems.

R-4

Abs Jour : Referat Zhur - Biologii, No 16, 1957, 70558

Author : Tkeshelashvili, T.V.

Title : Changes in the Blood After Extensive Resection of the Small Intestine

Orig Pub : Soobshch. AN GruzSSR, 1956, 17, No 4, 343-350

Abstract : In dogs after resection of 35-60% of the total length of the small intestine the blood picture changed relatively little. The qu. of chlorides and N was in the limits of lower and higher normals.

Card 1/1

- 102 -

TKESHELASHVILI, V.G.

Hydrobiological regimen of Lake Dzhandar. Soob. AN Gruz.
SSR 31 no. 3:675-682 S '63. (MIRA 17:7)

TKHAGUSHEV, N. A.

21903. TKHAGUSHEV, N. A.

Cherkesskiy sort yabloni aguyemiy. Trudy Krasnodarsk. in-ta pishch. prom-sti,
vyp. 7, 1949, s. 37-42. - Bibliogr: 8 nazv.

SO: Letopis' Zhurnal'nykh Statey, No. 29, Moskva, 1949.

TKHACUSHEV, N. A.

21902. TKHACUSHEV, N. A.

Pomologicheskaya i khozyaystvennaya kharakteristika cherkeskogo sorta
slivy khatsepke. Trudy krasnodarsk. in-ta rishch. prom-sti, Vyp. 7, 1949, s.
43-47. - Bibliogr: 7 nazv.

SO: Letopis' Zhurnal'nykh Statey, No. 29, Moskva, 1949.

TRNA VOL'Y, H. A.

333/13. Osnovnyye Cherkesskiye Sorta Grushi. Sad I Ogorod, 1949, No. 10, C. 28-30

SO: Leto is' Zhurnal'nykh Statey Vol. 45, Moskva, 1949

TYHAGUSHEV, Nukha Akhmedovich

(Kuban' Agricultural Inst) - Academic degree of Doctor of Agricultural Sciences, based on his defense, 4 May 1955, in the Council of the All-Union Sci Res Inst of Plant Cultivation, of his dissertation entitled: "Adygay (Cherkassian) Gardens."

Academic degree and/or title: Doctor of Sciences

SO: Decisions of VAK, List no. 27, 24 Dec 55, Byulletin' MVO SSSR
Uncl. JPRS/NY 545

TKHAGUSHEV, N. A.

"Adygeg (Circassian) Orchards." All-Union Order of
Lenin Academy of Agriculture imeni V. I. Lenin, All-Union Inst of
Plant Breeding, Krasnodar, 1955. (Dissertation for the Degree of
Doctor in Agricultural Sciences)

SO: M-955, 16 Feb 56

1. TKHAGUSHEV, N. A.

2. USSR (600)

4. Nuts

7. Widespread introduction of nut growing. Sad i og. no.10, 1952

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

TKHAKAKOV, U.U.

"The Protein Need of Highly-productive Cows";

dissertation for the degree of Candidate of Agricultural Sciences
(awarded by the Timiryazev Agricultural Academy, 1962)

(Izvestiya Timiryazevskoy Sel'skokhozyaystvennoy Akademii, Moscow, No. 2,
1963, pp 232-236)

POPOV, I.S., akademik; SKOROBAGATYKH, N.N., kand. sel'skokhoz. nauk;
TKHAKAKHOV, Kh.Kh., kand. sel'skokhoz. nauk; DAVYDOVA, L.P.,
kand. sel'skokhoz. nauk; FESYUN, G.I., aspirant

Protein requirements of high-yielding cows. Izv. TSKHA no.6:
191-202 '63. (MIRA 17:8)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni
Lenina (for Popov).

MOPIA, I.G. [deceased], assistant; GIL'BERMAN, I.G., head, assistant; ...
 YENAKAYEV, M.I., head, assistant; ...
 sel'skokhoz. nauk; ...

Protein requirements of high-yielding com. izv. ISSN no. 12-23
 164. (1974)

1. Kafedra kormleniya sel'skokhozyaystvennykh zhivotnykh Respublikoy
 ordona ienina sel'skokhozyaystvennoy akademii izdati k.A. Leningrad.
2. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk izdati V. .
 ienina (For Izgov).

BOGORODSKIY, G.N.; TKHANOV, G.P., inzhener.

The type FTA-M facsimile transmitter. Vest.svyazi 17 no.2:3-5
F '57. (MLRA 10:3)

1. Starshiy inzhener Tekhnicheskogo upravleniya Ministerstva
svyazi SSSR (for Bogorodskiy) 2. Nachal'nik laboratorii Nauchno-
issledovatel'skogo instituta Ministerstva radiotekhnicheskoy
promyshlennosti (for Tikhonov).
((Phototelegraphy)

Ekho psynoi A.
DYADYURENKO, A., podpolkovnik; GU.II, P., sten .; KOLPSAY V, A. gardi:
podpolkovnik

Important problem. Voen.vest. D. n. 1986. (II A 2,)
(Russia--Army--officers)

KUSHKHOV, Anatoliy Khazhbiyevich; TKHASHOKOV, A.F., 1962.

[Outline of the history of botanical study of the
Kabardinc-Balkar A.S.S.R.] Ocherk istorii botanicheskogo
izucheniia Kabardinc-Balkarii. Nal'chik, Kabardinc-Balkarskoe
knizhnoe izd-vo, 1962. 145 p. (MIRA 18:3)

TKHAKHOKOV, N.I.
SHAUTSUKOVA, L.K., starshiy prepodavatel'; ~~TKHASHOKOV, N.I.~~, student;
KHAPAZHEV, T.Sh., student; KHAKULOV, L.A., student; DZOBLAYEV, A.A.,
student.

Physiological and biochemical change during amytal-induced sleep in
rabbits. Uch.zap.Kab.gos.ped.inst. no.10:113-127 '56. (MLRA 10:3)
--(~~SEMP~~-THERAPEUTIC USE) (AMATYL)

ИТХАШОНОВ, А.И.

USSR/Pharmacology, Toxicology - Narcotics.

U-1

Abs Jour : Ref Zhur - Biol., No 3, 1958, 12845

Author : Shautsukova, L.K., Tkhashonov, N.I., Khapazhev, T.Sl.,
Khakulov, L.A., Dzoblayev, A.A.

Inst : -

Title : Certain Physiologic and Biochemical Changes in Rabbits
During Amytal-Induced Sleep.

Orig Pub : Uch. Zap. Kabardinsk. gos. ped. in-t, 1956, vyp. 10, 113-
126.

Abstract : Experiments were performed on male rabbits. A 15% solution of sodium amytal in a dose of 1.5-2 ml. was administered into the ear vein on 3 successive days. During the amytal-induced sleep, total plasma proteins decreased in proportion to the duration of the sleep. Blood sugar and iron decreased during the first two days but then began to increase until the sleep was terminated. During the amytal-induced sleep there was a decrease in Hb. and

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IKHELIDZE, L.M.

PLANNED WORK EXPLOITATION 50W/213

International Conference on the Peaceful Uses of Atomic Energy, 2nd, Geneva, 1958

Belady sovetskikh uchenykh: polucheniye i primeneniye izotopov (Reports of Soviet Scientists: Production and Application of Isotopes) Moscow, Atomizdat, 1959, 980 p. (Series: Itz: Trudy, vol. 6) 8,000 copies printed.

Eds. (Title page): G.V. Kurtyanov, Academician, and I.I. Morikov, Corresponding Member, USSR Academy of Sciences; EL (Inside back): L.D. Andreyenko; Tech. Ed.: L.D. Andreyenko.

PURPOSE: This book is intended for scientists, engineers, physicians, and biologists engaged in the production and application of atomic energy to research, teaching, and practice and graduate and undergraduate students of higher technical schools where nuclear science is taught; and for the general public interested in atomic science and technology.

COVERAGE: This is volume 6 of a 6-volume set of reports delivered by Soviet scientists at the Second International Conference on the Peaceful Uses of Atomic Energy held in Geneva from September 1 to 13, 1958. Volume 6 contains 32 reports on: 1) modern methods for the production of stable radioactive isotopes and their labeled compounds, 2) research results obtained with the aid of isotopes in the field of chemistry, metallurgy, machine building, and agriculture, and 3) dosimetry of ionizing radiation. Volume 6 was edited by: S.V. Lvinitskiy, Candidate of Medical Sciences; V.I. Prusakov, Candidate of Chemical Sciences; and V.V. Seider, Candidate of Medical Sciences. See Sov/2001 for titles of volumes of the set. References appear at the end of the articles.

28. Dzidis, V.I., S.I. Danilov, and B.V. Timofeyev-Ressovsky. Radiosensitive isotopes for solving problems in hydrobiology (Report No. 2317) 375
29. Asimov, O.L. Radioisotopes in the Leningrad Island (Report No. 2300) 347
30. Troitskiy, I.A. (Deceased). Silver tracer permeation of the skin, its inclusion in the albumen of the wool, and its secretion from the organism of the animal (Report No. 2318) 354
31. Arifov, U.A., T.D. Arsalanov, V.A. Berov, G.A. Guseynov, G.A. Elvay, S.Z. Fakhriyev, M. Jafarova, T.F. Fakhriyeva, S.K. Guseynov, and S.M. Guseynov. Radiosensitive killing of bacteria of the milk-borne feeding illnesses (Report No. 2321) 352
32. Rubin, B.A. and L.V. Verbitskiy. Studying the effect of ionizing radiation on the proteolysis of potato tubers with respect to yeast-like storage (Report No. 2331) 375

TKHELIDZE, L. M.,
ARIFOV, U. A., BARNOV, V. A., GUMANSKIY, G. A., KLEYH, G. A., PASHINSKIY, S. Z.,
TKHELIDZE, L. M., TRITSKHLADZE, T. V., CHKHELDUE, T. H., and SHENKOV, S. N.

"Treatment of Silkworm Cocoons by Radiation."

paper to be presented at 2nd UN Intl'. Conf. on the peaceful uses of Atomic
Energy, Geneva, 1 - 13 Sept 58.

GADAKHABADZE, V.I.; TKHELIDZE, L.M.

The introduction of white cocoon and hybrid cocoons. Tekst.
prom. 16 no.8:8 Ag '56. (MLRA 9:10)

(Georgia--Silk manufacture)

TKHILADZE, G.

Methods for economizing drying oil. Stroitel' 2 no. 6: 8-9 Je '56.
(MIRA 10:1)

1. Nachal'nik Tsentral'noy nauchno-issledovatel'skoy laboratorii
Glavmosstroya.
(Painting, Industrial) (Emulsions)

SIZOV, Vasilii Nilolayevich, prof., doktor tekhn.nau.;
RUDENKO-MORGUN, Ivan Yakovlevich, dots., kand. tekhn.
nauk; TKHILADZE, Georgiy Rodionovich, inzh.; USENKO,
Vasilii Mitrofanovich, kand. tekhn. nauk; SHVIDENKO,
V.N., prof., retsenzent; DANILEVSKIY, A.S., inzh.,
retsenzent; KUPERSHMIDT, L., red.

[Technology of construction] Tekhnologiya stroitel'nogo
proizvodstva. [By V.I.Sizov i dr. Moskva, Vysshaya shkola,
1964. 613 p. (MIRA 19:1)

TKHILADZE, G. R.; VOLODARSKIY, G. I.

Drilling and Boring

A drill with hard-alloy tip for drilling holes in brick walls. Biul. stroi. tekhn. 9 no. 1, 1952. Minmashstroy, Treest Otdelstroy; Inzh.

SO: Monthly List of Russian Accessions, Library of Congress, April ²195~~3~~, Uncl.

TKHILADZE, G.R., VOLODARSKIN, G.I.

Hose Couplings

Standard hose couplings. Biul.stroi.tekh., 2, no. 14, 1952.

9. Monthly List of Russian Accessions, Library of Congress, NOVEMBER 1952 ~~1953~~, Uncl.

1. TKHILADZE, G. R. ENG.
2. USSR (600)
4. Plastering
7. Rationalization of decorative work. Biul. stroi. tekhn. 9 no. 19, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953, Unclassified.

1. TKHILADZE, G. R.
2. USSR (600)
4. Building Machinery; Plastering
7. Mobile plastering machine units Stroi. prom. 30, no. 4, April 1952
Nachal'nik Tsentral 'noy Nauchno-Issledovatel 'skoy Stantisii Tresta,
Otdelstroy Minmashstroya.
9. Monthly List of Russian Accessions, Library of Congress, June 1952.
UNCLASSIFIED

SHEPELEV, A.M., inzhener; TKHILADZE, G.R., inzhener nauchnyy redaktor.

[Paper hanging] Oboinye raboty. Moskva, Gos. izd-vo lit-ry po
stroitel'stvu i arkhitekture, 1953. 31 p. (MIRA 7:7)
(Paper hanging) (Wallpaper)

TKHILADZE, G.R., inzhener, nachalnik.

Finishing of building facades in winter. Stroi.prom. vol. 31 no.9:17-19
S '53. (MLBA 6:9)

1. TSentral'naya nauchno-issledovatel'skaya laboratoriya Ministerstva
stroitel'stva. (Plastering--Cold weather conditions)

TKHILADZE, G. I.

3352 TKHILADZE G. R. AND VOLODARSKIY, G. I.

Mekhanizatsiya parkegnykh rabot. M., 1954 16 S. S chert. 26 sm (Akad. Nauk
SSSR. In-T Tekhn. Ekon informatsii. Periodich informatsiya tema no 47)
1.000 ekz B ts Na obl ovt Ne ukazany (54-57189) 694.631 a 3.0025

TKHILADZE, G.R.

[Equipment for the mechanization of plastering] Oboorudovanie
dlia mekhanizatsii shtukaturnykh rabot. Moskva, Gos. izd.
lit. po stroit-vu i arkhitekt-re, 1954. 216 p. (MIRA 8:1 D)

TRHILADZE G.R.

KRESTOV, M.A., redaktor; TRHILADZE, G.R., inzhener, nauchnyy redaktor;
BEGAK, B.A., redaktor; PERSON, M.N., tekhnicheskiiy redaktor.

[Technology of finishing work] Otdelochnaia tekhnika. Pod obshchei
red. M.A.Krestova. Moskva, Gos. izd-vo lit-ry po stroitel'stvu i
arkhitekture. No. 2. 1954. 82 p. (MLRA 7:11)

1. Akademiya arkhitektury SSSR, Moscow. Laboratoriya otdelochnykh
rabot.

(Façades) (Painting, Industrial)

TKHILADZE, G.R., inzhener.

For progressive technology in painting. Gor.khoz. Mosk. 29 no.11:
27-31 N '55. (MLRA 9:3)

(Painting, Industrial)

MESHKOVSKAYA, V.V.; SMIRNOV, V.Ya.; ANTIPOV, M.M.; ~~TKHILADZE, G.R.~~

Mobile mechanized machine for preparing paint components. Rats. i izobr.
predl.v strel.no.123:6-9 '55. (MLRA 9:7)
(Paint machinery)

SMIRNOV, V.Ya.; PEREPOLKINA, M.S.; ANTONOV, M.M.; TEKHILADZE, G.R.

Mobile all-purpose machine for parquet floor layers. Rats. i izobr.
predl.v stroi. no.123:13-17 '55. (MIRA 9:7)
(Parquetry)

VASADZE, Ye.N.; ~~TKHINYALELI~~, G.Kh.

Turbodrilling of mine shafts. Azerb. neft. khoz. 37 no.8:
21-24 Ag '58. (MIRA 11:11)
(Shaft sinking)

TKHIR, D.G.

Equipment and technology for drilling structural-prospecting
wells on the territory of the East Ukrainian oil- and gas-
bearing region. Neft. i gaz. prom. no. 4827-29 0-0 '64
(MIRA 18s2)

TKHIR, D.G.

Turbodrilling in sinking structural wells. Neft. i gaz.
prom. 3:35-36 J1-S '65. (MIRA 18:11)

L 05142-57 ENT(1)/FCC GW

ACC NR: AR6017547

SOURCE CODE: UR/0169/66/000/001/D014/D014

AUTHOR: Parkhomovskiy, O.A.; Andreyeva, R.I.; Burakovskiy, L.Ye. Goncharova, T.A.; Grigor'yeva, A.I.; Ivanets, N.I.; Ivanyuta, M.M.; Kozar, L.T.; Raykher, L.D.; Senina, A.S.; Tkachenko, Zh. Ya.; Tkhir, D.G.

TITLE: Determination of the development level of the technique and technology of geological prospecting for oil and gas in the Ukraine

SOURCE: Ref. zh. Geofizika, Abs. 1D97

REF SOURCE: Tr. Ukr. n.-i. geologorazved. in-t, vyp. 10, 1965, 10-17

TOPIC TAGS: prospecting, seismic prospecting, ~~oil prospecting~~, gas prospecting, PETROLEUM, magnetometer, gravimetry / M-2 MAGNETOMETER, p

UKRAINE
ABSTRACT: Geological-geophysical prospecting for oil and gas, completed on the Ukraine during 1960-1962 was analysed. At present all the oil-bearing territory of the Ukraine is covered by prospecting survey with the M-2 magnetometer. The cost of study was 46.4 roubles/km². The output and precision of the aeromagnetic survey is much better. The gravimetric survey is basically complete. The cost of the total survey was 92.2 roubles per km² in 1960 and 47.2 roubles in 1962. Highly precise gravimeters (.01 - .03 mgal) can elucidate various anomalies. In spite of the relative cheapness of the electro-recon method, and its mobility, it has not been afforded the deserved development in the Ukraine. Volume of seismic work reaches 87% of the total geophysi-

Card 1/2

UDC: 550.830(477)

L 06143-67

ACC NR: AR6017547

cal work volume. Cost of 1 km of seismic profile work was 560-850 roubles. In 1962, seismic reconstructing instrumentation for the automatic processing of seismograms and design of boring sections has been developed. Techno-economical indices of structural mapping boring are very high; those of structural-recon boring are at relatively low levels. On the basis of consideration of the possibilities of each method, a methodology for the recon of oil and gas is proposed. Translation of abstract.

SUB CODE: 08

Card 2/2 m/E

TKhomirov, D.F.

TKHOMIROV, D.F.

Staff catchers must be improved. Avtom., telem. i svyaz'2 no.1:
(MIRA 11:1)
39 Ja '58.

1. Starshiy elektromekhanik Volkhovstroyevskoy distantsei signali-
zatsii i svyazi Kirovskoy dorogi.
(Railroads--Signaling)

ADAMOVICH, A.V., kand.tekhn.nauk; TKHOMIROV, Ya.V., kand.tekhn.nauk

Statistical investigation of the strength of the block carter
of a V-engine. Avt.prom. 27 no.8:8-11 Ag '61. (MIRA 14:10)

1. Nauchno-issledovatel'skiy avtomobil'nyy i avtomotorny
institut.
(Automobiles---Engines)

LEVIN, V.I.; GOLUTVINA, M.M.; TKHOMIROVA, Ye.A.

Preparation of arsenic-74 from neutron-irradiated selenium.

Radiokhimiia 3 no.5:597-600 '61.

(MIRA 14:10)

(Arsonic--Isotopes) (Selenium) (Neutrons)

BASARGIN, V.A., inzh.; GRINBERG, V.L., inzh.; TKHOR, A.P., inzh.;
ZAZIMKO, V.N., inzh.

Mechanization of duck breeding farms. Mashinostroenie no.5:
83-84 S-0 '64 (MIRA 18s2)

TKHJR, L.F.

Chemiluminescence of oleic acid. Trudy MGIP. Gtd. biol. 21:
203-205 '65. (MIRA 18:6)

TKHOR, L.F.; KOZLOV, Yu.P.

Effect of some antibiotics on the chemiluminescence of oleic acid. Biofizika 10 no.3:523-524. '65. (MIRA 18:11)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni Lomonosova. Submitted July 11, 1964.

TKHOR, T.G.; PANKRATOV, M.A., prof., nauchnyy rukovoditel' raboty

Restoration of reflexes from the auricular skin of a rabbit as
related to the regeneration of nerves. Uch. zap. Ped. inst. Gerts.
239:131-137 '64. (MIPA 18:3)

BEDNYI, M.S.; TKHOR, V.G. (Dnepropetrovsk)

Oldest hospital in the Ukraine. Sov. zdrav. 21 no.2:60-63
'62.

(MIRA 15:3)

(UKRAINE--HOSPITALS)

USSR/Farm Animals. Sheep and Goats.

Q

Abs Jour: Ref Zhur-Biol., No 17, 1958, 78766.

Author : Lermontov, V. S.; ~~Tkhor~~, Ye. S.

Inst :

Title : On the Effectiveness of Winter Lambing of
Sheep.

Orig Pub: Ovtsevodstvo, 1958, No 1, 5-6.

Abstract: In a test group (Februnary birth), 5% of the ewes were barren, 0.5% of the lambs died; 124 lambs of 100 ewes were raised. In the control group (April birth) respectively: 15, 2.1 and 100. Difference in live weight of the lambs for 5 months in favor of the test group comprised: with young rams 2.7 kg, ewe yearlings

Card : 1/2

USSR/Farm Animals. Sheep and Goats.

Q

Abs Jour: Ref Zhur-Biol., No 17, 1958, 78766.

0.6 kg; in length of wool, respectively: 0.7
and 0.6 cm.

Card : 2/2

44

L 13064-63

BDS

ACCESSION NR: AT3003010

S/2927/62/000/000/0235/0235

AUTHOR: Miselyuk, Ye. G.; Tomashevskaya, R. L.; Tkhorik, Yu. A.

TITLE: Ten-element diode matrix (A brief information) [Report of the All-Union Conference on Semiconductor Devices held in Tashkent from 2 to 7 October 1961]

SOURCE: Elektronno-dy*rochny*ye perekhody* v poluprovodnikakh. Tashkent, Izd-vo AN UzSSR, 1962, 235

TOPIC TAGS: semiconductor matrix, diode matrix, ten-element matrix

ABSTRACT: Soviet-manufactured DM-10^h ten-element diode matrices⁰ are intended for passive-storage computers. The DM-10 matrix comprises 10 diodes with a common base mounted on a 10 x 10 sq mm panel; it has the following parameters (with 20% spread): maximum forward current 0.25 amp, maximum peak current 1 amp, forward resistance at 0.6 v 2-4 ohms, peak resistance 5 ohms, maximum reverse current 6 microamp, breakdown voltage 60-80v, operating temperature range -50 +65C. Orig. art. has: 1 figure.

ASSOCIATION: Akademiya nauk SSSR (Academy of Sciences SSSR); Akademiya nauk Uzbekskoy SSR (Academy of Sciences UzSSR); Tashkentskiy gosudarstvennyy (Tashkent St. Un.)
Card 1/2/

L 12815-63 EWT(1)/EWG(k)/EWP(q)/EWT(m)/BDS/T-2/EEC(b)-2/ES(t)-2 AFFTC/
 ASD/ESD-3 Pz-4/Pm-4 JL/IJP(C)
 ACCESSION NR: AT3003011 S/2927/62/000/000/0236/0243

AUTHOR: Miselyuk, Ye. G.; Tomashevskaya, R. L.; Tkhorik, Yu. A. 76

TITLE: Germanium²⁵ diffusion diodes²⁵ for pulse circuits [Report at the All-Union Conference on Semiconductor Devices, Tashkent, 2-7 October, 1961]

SOURCE: Elektronno-dy*rochny*ye perekhody* v poluprovodnikakh. Tashkent, Izd-vo AN UzSSR, 1962, 236-243

TOPIC TAGS: germanium diode, IDG-1 diode

ABSTRACT: As a prerequisite to the development of high-power pulse-type Ge diodes, transients in Ge diffusion diodes were studied. Effects of resistivity and life-time of materials, geometric factors, and p-n junction processing on the switching characteristics of diodes were investigated. Particularly, the effect of injection level (or forward current) and reverse voltage on the reverse-resistance recovery time, for various lifetimes and base thicknesses, were investigated. As a result, a new Ge diode, IDG-1, with these parameters was developed: peak current with a 0.5-microsec pulse and 1/2000 pulse duty factor, up to 15 amp; voltage drop at 1 amp, 0.6 - 0.8 v; forward resistance, 0.5 - 1.4 ohms; reverse current, 0.6 - 15

Card 1/2

L 12815-63

ACCESSION NR: AT3003011

microamp; breakdown voltage, 80-100 v; recovery time, 0.25 microsec or less; pulse forward resistance, 5 ohms; working temperature range, -100 +65C. The IDQ-1 diode was tested in various computers and is recommended for use in switching circuits, ferrite-diode circuits, ferroelectric circuits, discriminators, registers, and other circuits involving heavy currents. The diode was set in small-lot production. Orig. art. has: 7 figures, 5 formulas, and 3 tables.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 15May63

ENCL: 00

SUB CODE: PH, OE

NO REF SOV: 006

OTHER: 008

Card 2/2

247700

37873

S/185/62/007/005/003/013
D407/D301

AUTHOR: Tkhoryk, Yu.O.

TITLE: Emissivity of diffused p-n junctions

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 7, no. 5, 1962,
476 - 481

TEXT: The distribution of carrier concentration in a diffused p-n junction is considered which has been obtained by the method of thermodiffusion. A formula for the emissivity of p-n junctions is obtained. It was shown by K.B. Tolpygo (Ref. 1: ZhTF, 27, 884, 1957) that the coefficient of injection γ is not a constant of the p-n junction (as in Shockley's theory), but depends on the structure of the junction, the properties of the contact metal-semiconductor and the magnitude of the current. The parameter β , called by Tolpygo the emissivity of the p-n junction, combines all these properties. In Ref. 1 (Op. cit.) the parameter β was calculated for linear and exponential distributions of the doping impurities and criteria for high emissivity (i.e. large values of β) were derived. Large values of β are particularly important for pulse diodes, where a low direct Card 1/3

Emissivity of diffused p-n junctions

S/185/62/007/005/003/013
D407/D301

resistance is required; as pulse diodes are normally obtained by the diffusion method, it is important to derive analogous criteria for diffused p-n junctions. It is assumed that the p-n junction is formed by the diffusion of donors in a p-type semiconductor. Thereby the donor concentration decreases with the distance from the edge according to the law $\text{erfc}(x/2\sqrt{Dt})$, where x is the distance, D - the diffusion coefficient of the donors, and t - the time of diffusive annealing. The n-layer is divided into 3 regions; the points ξ_1 and ξ_2 (which are dimensionless coordinates related to x), are chosen in such a way that the donor concentration can be approximated by a linear function or by an asymptotic formula. After calculations, one obtains the following formula for β :

$$\beta = \frac{N(0)/Q_+}{1 + A\xi_0 \frac{N(0)}{Q_+}}, \quad (15)$$

where Q_+ is the transmittance (for holes) of the contact; $N = n/p_p$ (n being the electron concentration and p_p - the equilibrium concentration)
Card 2/5

Emissivity of diffused p-n junctions . S/185/62/007/005/003/013
D407/D301

tration of holes in the base), $A = e \cdot p_0 / 4\pi$. The accuracy of the above approximation is estimated. Thereby one obtains

$$1 \gg Q_+ \Xi_0 + A \Xi_0^2 N(0). \quad (24)$$

Formulas (15) and (24) are in agreement with the corresponding formulas of Ref. 1 (Op.cit.). It is noted that the emissivity of the p-n junction (in the case of a linear impurity distribution) increases with $dv/d\xi$ (v being related to the donor-concentration distribution); for a diffused p-n junction $dv/d\xi$ is a variable quantity. It is also noted that, other conditions being similar, the emissivity of diffused p-n junctions is higher than with a linear impurity-distribution. There are 1 figure and 5 references: 3 Soviet-bloc and 2 non-Soviet-bloc. The most important English-language publication reads as follows: J.R.A. Beale, Proc. Phys. Soc., 70, 1087, 1957.

ASSOCIATION: Instytut napivprovidnykiv AN URSR (Institute of Semiconductors of the AS UkrRSR) Kyiv

SUBMITTED: January 24, 1962

Card 3/3

TKHORIK, Yu. A.

S/109/62/007/006/021/024
D234/D308

9.4340

AUTHORS: Kolomiyets, B. T., Litvinova, E. M., Miselyuk, Ye. G.,
Tkhorik, Yu. A. and Shilo, V. P.

TITLE: Effect of fusible glass coating on the characteristics
of germanium diodes

PERIODICAL: Radiotekhnika i elektronika, v. 7, no. 6, 1962,
1054-1055

TEXT: Three types of glass coatings on germanium diffusion diodes
were tested: $\text{As}_2\text{Se}_3\cdot\text{I}_{1.5}$; $\text{As}_2\text{Se}_3\cdot\text{Tl}_2\text{Se}$; $2\text{As}_2\text{S}_3\cdot\text{Tl}_2\text{S}$. The whole ex-
posed surface of the semiconductor, including the p-n transition,
was coated. A graph of a typical variation of V-A characteristics
after coating is given. The characteristics so obtained were prac-
tically unchanged over many days. Glass coating is found to im-
prove essentially the inverse branches of the characteristics. The
effect of all three types of glass is nearly the same. Improvement
of characteristics was also observed when the glass had been re-

Card 1/2

Effect of fusible ...

S/109/62/007/006/021/024
D234/D308

moved immediately after coating which disagrees with the result of other Soviet authors. There is 1 figure.

ASSOCIATION: Institut poluprovodnikov AN USSR; Fiziko-tekhnicheskii institut im. A. F. Joffe AN SSSR (Institute of Semiconductors, AS UkrSSR; Physico-Technical Institute im. A. F. Joffe, AS USSR)

SUBMITTED: February 13, 1961

Card 2/2

TKHORIK, Yu.A. [Tkhoryk, IU.O.]

Accumulation of minority current carriers in semiconductor
diodes with a narrow base. Ukr. fiz. zhur. 8 no.10:1128-
1141 0 '63. (MIRA 17:1)

1. Institut poluprovodnikov AN UkrSSR, Kiyev.

ACCESSION NR: AP4017393

S/0185/64/009/002/0139/0149

AUTHOR: Il'yenkov, A.I.; Tkory*k, Yu. O.

TITLE: Measurement of short lifetimes of current carriers in semiconductor devices by the pulse method

SOURCE: Ukrayins'ky*y fizy*chny*y zhurnal, v. 9, no. 2, 1964, 139-149

TOPIC TAGS: semiconductor, semiconductor lifetime, pulse method, current carrier effective lifetime, diode, transistor

ABSTRACT: The effective lifetime τ_e of the minority carriers in the base region of a semiconductor device is the most important parameter which determines the frequency characteristics and the transient response of the device. Many methods for measuring τ_e in diodes have been proposed but the most practical and direct method is based on the investigation of the transient process which arises during diode switching. For values of $\tau_e \approx 10^{-7}$ sec, the measurements can be performed on an oscilloscope. When a p-n diode is switched from forward to reverse, the reverse current is established in two stages t_{lim} or phase of constant reverse current (when the diode resistance is small compared to the external circuit resistance) and the phase of current decay (which begins when the minority carrier concentration near the p-n junction goes to zero). The forward current pulse length t_f , its magnitude I_f , as well as the magnitude of the reverse current

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ACCESSION NR: AP4017393

I_r which flows during t_{lim} , are related to γ_e by the formula:

$$\operatorname{erf} \sqrt{\frac{t_{lim}}{\gamma_e}} = \frac{1}{B_0 + 1} \operatorname{erf} \sqrt{\frac{t_1 + t_{lim}}{\gamma_e}} \quad (1)$$

where $B_0 = \frac{I_v}{I_f}$ and $B_0 \geq 0.5$.

Equation (1) is valid when the base region is much longer than the diffusion length of the minority carriers and when the switching pulse has zero rise time. When the finite rise time in the leading edge of the switching pulse is taken into account the use of equation (1) may lead to serious errors. For a planar p-n junction diode switched by a trapezoidal pulse, when the forward and reverse resistances in the external circuit may be unequal (Fig. 1 of the Enclosure), the following formula is derived, which gives the desired minority lifetime γ in terms of measurable parameters:

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ACCESSION NR: AP4017393

$$\begin{aligned}
 i = & \frac{2(a+b+c)-1}{2a} \operatorname{erf} \sqrt{a+b+c} + \frac{\sqrt{a+b+c}}{a\sqrt{\pi}} e^{-(a+b+c)} + \\
 & + \frac{aB_0-b}{b} \left[\frac{2(b+c)-1}{2a} \operatorname{erf} \sqrt{b+c} + \frac{\sqrt{b+c}}{a\sqrt{\pi}} e^{-(b+c)} \right] - \\
 & - \frac{B_0}{h} \left(\frac{2c-1}{2} \operatorname{erf} \sqrt{c} + \frac{\sqrt{c}}{\sqrt{\pi}} e^{-c} \right).
 \end{aligned} \quad (2)$$

where $a = \frac{t_f}{\tau}$, $b = \frac{t_r}{\tau}$, $c = \frac{t_e}{\tau}$, and the intervals t_f , t_p and t_r are defined in Fig. 2 of the Enclosure. Equation (2) can be simplified considerably if the constant reverse current interval, t_{lim} , is shorter than the duration of the leading edge of the switching pulse (Fig. 2b). A general Laplace transform equation from which an expression analogous to Eq. (2) can be derived for any switching pulse shape, is also derived. The errors which can be encountered in calculation, when the finite duration of the leading edge of the trapezoidal pulse is neglected (as in Eq. 2), are summarized in Fig. 3 of the Enclosure. Some experimental data which support the conclusions reached in this paper are tabulated in the original. It is evident that for large B_0 values the values of γ_1 are too low. The

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ACCESSION NR: AP4017393

error $\frac{\gamma_e - \gamma_1}{\gamma_e}$ is systematic and ranges from 13.6-21.6% for $B_0 = 0.2$, from 7.2 to 17.7% for $B_0 = 0.459$ and from 22.2 to 42.4% for $B_0 = 1$. The accuracy in the estimate of γ_e is 6.6% and also $\gamma_2 < \gamma_e$ even though the error in γ_2 is smaller than in γ_1 . "The authors thank E. M. Ly*ty*noviy for construction of the diodes." Orig. art. has: 3 figures, 1 table and 31 formulas.

ASSOCIATION: Insty*tut avtomaty*ky* ta elektrometriyi, SV AN SSSr, Novosibirsk (Institute of Automation and Electric Measurement); Insty*tut napivprovidny*kiv AN URSR, Kiev (Semiconductor Institute)

SUBMITTED: 05Aug63

DATE ACQ: 19Mar64

ENCL: 03

SUB CODE: PH

NO REF SOV: 014

OTHER: 004

Card 4/24

L 20501-65

ACCESSION NR: AP4038648

and $Tl_2S \cdot 2As_2S_3$. It is found that annealing of n- or p-type Ge results in an increase of μ by 2-3 times, a similar effect is observed for the glassy state. The increase of μ is by 3-5 times. Annealing of Si results in 2-4 times lower μ , with a subsequent glass treatment μ was reduced to about 300 cm²/sec. The same value of μ was obtained by a vacuum evaporation of n-Si on gold (0.1-0.2 microns thick). The results are given in Table 1 and 2. The results are given in Table 1 and 2.

ASSOCIATION: Institut poluprovodnikov AN SSSR - Institute of Semiconductors AN SSSR

SUBMITTED: 22Mar63

ENCL: 00

SUB CODE: MM, SS

NO REF SOV: 006

OTHER: 004

Card 2/2

TRHORNIR YIA

L 14799-65 AFWL/ASD(a)-5/ESD(t)
ACCESSION NR: AP1044163

8 01 5 64-000-000 0 31 1961

AUTHOR: GORDON, R. S. (GORDON, R. S.)

11/11/64

SOURCE: Delayins klyt fizy. Zhurn. tekhn. fiz. 1964, 451-61

TOPIC TAGS: transient process, semiconductor, carrier storage, carrier dissipation, semiconductor diode

ABSTRACT: The processes of storage and dissipation of non-equilibrium charge carriers in a p-n junction diode are investigated. The results of the experiments show that the storage time of the diode is determined by the recombination of the carriers in the depletion region. The storage time is determined by the recombination of the carriers in the depletion region. The storage time is determined by the recombination of the carriers in the depletion region.

Card 1/2

L 14799-65

ACCESSION NR: AP4044166

diffusion, and in the second type by the drift. The author is grateful to
A. P. Klimenko for help with the experiment. Orig. art. has: 8 figures, 32
equations

ASSOCIATION: Institut poluprovodnikov AN URSR (Institute of Semiconductors
AN URSR)

SUBMITTED: 19Jan64

ENCL: 00

SUB CODE: SS

NO REF SOV: 012

OTHER: 003

Card 2/2

GRIENIKOV, Z.S. [Hrybnykov, Z.S.]; TKHORIK, Yu.A. [Tkhoryk, IU.O.]

Transients of storage and decay of nonequilibrium carriers
in semiconductor diodes. Part 3. Symmetric thin diodes at
superhigh injection levels. Ukr. fiz. zhur. 9 no.9:943-947
S '64. (MIRA 17:11)

1. Institut poluprovodnikov AN UkrSSR, Kiev.

GORBAN', A.P.; TKHORIK, Yu.A.

Device for measuring the capacitance of semiconductor diodes.
Avtom. i prib. no.2:57-60 Ap-Je '63. (MIRA 18:8)

1. Institut poluprovodnikov AN UkrSSR.

ZHURAVEL', F.A.; IL'YENKOV, A.I.; TKHORIK, Yu.A.

Evaluation of the pulse characteristics of semiconductor diodes.
Trudy Inst. avtom. i elektrometr. SO AN SSSR no.16:68-85 '65.
(MIRA 18:8)

TKHORIK, Yu.A.

Effect of the dependence of the recombination speed in the plane
of a non rectifying contact from the injection level on the spreading
time. Radiotekh. i elektron. 10 no.3:574-576 Mr '65.

(MIRA 18:3)

TKHORIK, Yu.A.

Nature of inertial p-n junction diodes with small leakage rates
of the minority current carriers through a nonrectifying junction.
Radiotekh. i elektron. 10 no.6:1162-1163 Je '65.

(MIRA 18:6)

KLIMENKO, A.P. [Klymenko, A.P.; TKHORIK, Yu.A. [Tkhoryk, IU.O.]

Use of the simultaneous diffusion of two admixtures in manufacturing quick-response diodes. Ukr. fiz. zhur. 10 no.2:238-239 F '65.
(MIRA 18:4)

1. Institut poluprovodnikov AN UkrSSR, Kiyev.

KLIMENKO, A.P. [Klymenko, A.P.]; TKHORIK, Yu.A. [Tkhoryk, IU.O.]

Effect of the duration of the pulse front on direct transients
in semiconductor diodes. Ukr. fiz. zhur. 9 no.11:1271-1273 N '64
(MIRA 18:1)

1. Institut poluprovodnikov AN UkrSSR, Kiyev.

GRIBNIKOV, Z.S. [Hrybnykov, Z.S.]; TKHORI, Yu.A. [Tkhoryk, Yu.A.]

Transient processes of storage and decay of nonequilibrium current carriers in semiconductor diodes. Part 1. Low injection levels. Ukr. fiz. zhur. 9 no.6:648-658 Je '64.

(MIRA 17:11)

1. Institut poluprovodnikov AN UkrSSR, Kiyev.

BONDARENKO, V.N.; LITVINOVA, E.M.; SNITKO, O.V.; TKHORIK, Yu.A.

Effect of thermal treatment and some coatings on the velocity
of π and Ge surface recombination. Radiotekh. i elektron. 9
no. 5 876-881 My '64. (MIRA 17:7)

1. institut poluprovodnikov AN UkrSSR.

ACCESSION NO. A17 171

AUTHOR: Tkhonik, Yu. A.

TITLE: Effect of the recombination rate at the nonrectifying contact plane and the injection level upon the τ_{eff} of the p -Ge.

SOURCE: Radiotekhnika i elektronika, 1965, No. 10, p. 514, 517.

TOPIC TAGS: semiconductor characteristic, depletion time, semiconductor property

ABSTRACT: Several Soviet and Western articles are briefly reviewed, pointing out the effect of the injection level on the recombination rate in p -Ge and p -Ge of thick-base diodes. A theoretical calculation of the depletion time τ_{eff} is given.

Card 1/2

ACCESSION NR. APS...

for his variable host... and T. M. Agakanyan for a discussion. Orig. art. has
3 figures and 4 formulas

ASSOCIATION none

SUBMITTED: 28Mar64

ENCL: 00

SUB CODE: EC

NO REF SOV: 006

OTHER: 005

Card 2/2 *L.*

ACCESSION NR: AP-043326

AUTHOR: Kly*manko, A. P. (Klimenko, A. P.), Tkhor'y*k, Yu. O. (Tkhorik, Yu. A.)

TITLE: Investigation of recombination in nickel atoms in p-germanium at high injection levels

SOURCE: Ukrayins'ky* fizy*chny*y zhurnal, v. 9, no. 7, 1964, 733-743

TOPIC TAGS: injection level, current carrier recombination, current carrier lifetime, diode saturation current, germanium, nickel, nickel impurity concentration, semiconductor, semiconductor device, semiconductor diode

ABSTRACT: The dependence of the lifetime τ of current carriers in p-Ge diodes doped with Ni on the injection level and the temperature has been investigated. It was found that in diodes the dependence of τ on temperature is weaker than in massive specimens because of the influence of a surface recombination whose efficiency increases with

Card 1/2

L 3827-65

ACCESSION NR: AP4043034

cooling. The theoretical and observed dependence of τ on the injection level agree qualitatively. The pulse method for measuring τ has been theoretically analyzed. The calculations show that the pulse method provides accurate values for τ_n and τ_p at vanishing small and superhigh injection levels. To reduce the errors in the region of medium injection levels, the parameter has to be increased for the measuring circuit I_2/I_1 , where I_1 is the amplitude of the forward current, and I_2 is the amplitude of the reverse current after switching off the diode. As an example, a calculation was made of the dependence of the injection level on the current density at the p-n junction in p-Ge with a concentration of $3 \times 10^{15} \text{ cm}^{-3}$ of Ni at 296K, 235K, and 185K. Orig. art. has: 5 figures and 44 formulas.

ASSOCIATION: Institut poluprovodnikov AN URSR, Kiev, (Institute of Semiconductors, AN URSR)

SUBMITTED: 05Aug63

ATD PRESS: 3106

ENCL: 00

SUB CODE: EC

NO REF SOV: 016

OTHER: 010

Card 2/2

KLIMENKO, A.P. [Klymonko, A.F.]; TKHORIK, Yu.A. [Tkhoryk, Iu.O.]

Study of recombinations on nickel atoms in p-germanium at high
injection levels. Ukr. fiz. zhur. 9 no.7:733-743 J1 '64.

(MIRA 17:10)

1. Institut poluprovodnikov AN UkrSSR, Kiev.

TKHORIK, Yuriy Aleksandrovich [Tkoryk, IU.O.]; KISINA, I.V., red.izd-va;
RAKHLINA, N.P., tekhn.red.

[Semiconductors and electric power] Napivprovidnykova energetyka.
Kyiv, Vyd-vo Akad.nauk URSR, 1959. 51 p. (MIRA 13:9)
(Semiconductors) (Photoelectric cells)

L 20950-66 EWT(1) IJP(c) AT
ACC NR: AP6006759 SOURCE CODE: UR/0185/66/011/001/0040/0044

AUTHORS: Svyechnykov, S. V. (Svechnikov, S. V.); Tkhorik, Yu. O.
(Tkhorik, Yu. A); Pys'menny, Yu. H. (Pis'menny, Yu. G.)

ORG: Semiconductor Institute UkrSSR, Kiev (Instytut
naplivprovodnykiv AN URSR)

TITLE: Concerning the problem of a transparent contact for II-VI
type photoconductors 21.44-35

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 11, no. 1, 1966, 40-44

TOPIC TAGS: cadmium sulfide, cadmium compound, photoconductor,
photoconductivity, single crystal, optic property, electric property,
metal vapor deposition, volt ampere characteristic

ABSTRACT: The authors discuss the possibility of using CdO films as
transparent ohmic contacts for CdS-type photoconductors. The contact
properties of CdS single crystals and films with CdO films were in-
vestigated, along with the optical and electrical properties of CdO
films. The films were obtained by cathode sputtering of metallic

Card 1/2

L 20950-66

ACC NR: AP6006759

cadmium in a low vacuum under the following conditions: cathode diameter -- 6 cm, cathode-anode distance -- 1.6 -- 1.8 cm, current -- 50 to 70 mA, voltage -- 600 V, air pressure -- 0.4 to 0.65 torr. Under these conditions the polycrystalline films were deposited at a rate of 500 -- 600 Å/min. The resistivity of CdO films measured by the four-probe method amounted to $(3.2 -- 6.4) \times 10^{-3}$ ohm-cm, which does not contradict the data in the literature, and was temperature independent between -100 and 70C. The spectral dependence of the transmission coefficient was obtained. The volt-ampere characteristics of CdS films with CdO contacts were obtained at various temperature and illuminations. An investigation of the distribution of the potential along the CdS film with CdO contacts showed that the gradient of the potential decreases near the contacts. These results and also data on the noise characteristics of the contacts indicate that they are ohmic. Orig. art. has: 4 figures and 1 table.

SUB CODE: 20/ SUBM DATE: 05Mar65/ ORIG REF: 003/ OTH REF: 004

Card

2/2 *mg's*